

CLAIMS

What is claimed is:

1. A roof storage compartment cover for vehicles, particularly for passenger cars, with a vehicle roof (4) movable between a closed position, in which the roof (4) covers an interior vehicle space (11), and an open position, in which the roof (4) is deposited in a storage compartment (12) behind the interior vehicle space (11), said storage compartment (12) being provided with a cover (14) comprising a front cover part (15) and a rear cover part (16) disposed adjacent a vehicle body structure (17) providing an opening for accessing the storage compartment (12) when the rear cover part (16) is pivoted upwardly and forwardly in an intermediate position of the vehicle roof (4) and which, in the closed position of the vehicle roof (4) is moved to a position spaced from the adjacent vehicle body structure (17) to provide therebetween a passage for the roof (4), said cover parts (15, 16) being supported by a support console (19) so as to be pivotable relative to each other and movable relative to the vehicle body, said support console (19) being pivotally supported and said cover parts (15, 16) being disposed adjacent one another in a plane in an open and a closed position of the storage compartment and being movable between the open and closed positions by pivoting of the support console (19) and with the support console (19) being in a position corresponding to the closed position of the cover (14), the rear cover part (16) being pivoted toward the support console (19) below the front cover part (15).

2. A roof storage compartment cover according to claim 1, wherein said support console (19) is supported pivotably about a pivot axis (20), which is stationary relative to the vehicle body and extends transverse to the longitudinal vehicle direction.

3. A roof storage compartment cover according to claim 1, wherein said rear cover part is pivotably supported by a pivot joint on said support console (19).

4. A roof storage compartment cover according to claim 1, wherein said vehicle roof (4) is supported by an operating mechanism (5) which is linked to said cover (14) so as to actuate also said cover (14).

5. A roof storage compartment cover according to claim 4, wherein said roof (4) comprises a rear roof part (3), which is supported on the vehicle body so as to be pivotable about a transverse pivot axis (9) and operatively connected to the operating mechanism (5) for said cover (14).

6. A roof storage compartment cover according to claim 5, wherein said rear roof part (3) comprises a C-column (7) of the vehicle and said operating mechanism (5) interacts with the pivot movement of said C-column (7) during the movement of the vehicle roof (4) between the open and closed positions.

7. A roof storage compartment cover according to claim 1, wherein the drive connection to the cover (14) includes a different operating mechanisms (23, 24, 28 and 30, 32, 34) for driving the support console (19) and for driving the rear cover part (16).

8. A roof storage compartment cover according to claim 7, wherein the operating mechanisms (23, 24, 28, and 30, 32, 34) to the rear roof part have at least approximately coinciding pivot connection axes (29) and are disposed adjacent to the vehicle body based pivot axis (9) of the rear roof part (9) which is included in the vehicle body mount for the rear roof part (3).

9. A roof storage compartment cover according to claim 6, wherein the operating mechanism (23, 24, 28) for the rear cover part (16) comprises a drive arm (28) which is pivotally connected to the C-column (7) and engages, by way of a double arm lever (24), which is pivotally supported on the support console (19), the rear cover part (16) wherein the double arm lever (24) is linked opposite the support console (19) by way of a support lever (23) eccentrically with respect to the pivot axis (21) of the rear cover part (16).

10. A roof storage compartment cover according to claim 7, wherein said operating mechanism (30, 32, 34) connected to said console (19) comprises a drive arm (30) which is pivotally connected to the C-column (7), and which is connected by way of an intermediate arm (32) to a support arm (34) that is pivotally connected to the support console (19), and the intermediate arm (32) is pivotally connected to a vehicle body joint (33) and forms a position dependent support for the drive arm (3) and the support arm (34) connected thereto.

11. A roof storage compartment cover according to claim 10, wherein the pivot joint (33) of the intermediate arm (32) with respect to the vehicle body is disposed at one end of the

arm (32), where the arm is connected to a rocker (38) which is stationary during movement of the roof (4).

12. A roof storage compartment cover according to claim 11, wherein said rocker (38) is pivotally supported on a vehicle body-based support console (43) and has two arms (63, 64) extending from the pivotal support area.

13. A roof storage compartment cover according to claim 12, wherein one of said arms 63 of said rocker (62) comprises two legs (37, 39) one of said legs (37) of said rocker (38) being connected to the intermediate arm (32) and the other leg (39) of the rocker (38) carrying a catch pin (40) which, dependent on its position, is engaged by a catcher opening (41) so as to be fixed in position.

14. A roof storage compartment cover according to claim 13, wherein the catcher with the opening (41) is connected to the main operating arm (6) of the front part (2) of the roof (4) which is supported by a vehicle body-based pivot bearing and the axis of the catcher opening (41) coincides with the vehicle body-based stationary pivot axis of the main operating arm (6).

15. A roof storage compartment cover according to claim 13, wherein said catcher opening (41) releases the catch pin (40) when the roof (4) is open and deposited in the roof storage compartment (12), a locking member (45) is connected to said rocker (38) and extends into a locking opening (46) of the roof (4) deposited in the storage compartment (12) when the catch pin (40) is released from the catcher opening (41).

16. A roof storage compartment cover according to claim 15, wherein said locking member (45) is guided with respect to the vehicle body by a slide guide structure (47).

17. A roof storage compartment cover according to claim 1, wherein the drive for said roof (4) and said storage compartment cover is connected to the C-column and is a linear drive (operating cylinder 46), which is connected opposite the C-column (7) to the rocker (28) by way of a pivot joint.

18. A roof storage compartment cover according to claim 17, wherein said pivot joint (44) of the rocker (38) on the support console (43) is spaced from the pivot joint 42 by which the linear drive (operating cylinder 46) is connected to the rocker (38).

19. A roof storage compartment cover according to claim 17, wherein the linear drive formed by the operating cylinder (46) is connected by a drive linkage (49) forming a switchover drive coaxially with the pivot joint (9) of the C-column (7).